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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,112	03/16/2005	Kazuhito Kurita	0112857-510	9132
7590 William E Vaughan Bell Boyd & Lloyd PO Box 1135 Chicago, IL 60690		05/30/2007	EXAMINER KLIMOWICZ, WILLIAM JOSEPH	
			ART UNIT 2627	PAPER NUMBER
			MAIL DATE 05/30/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/528,112

**Applicant(s)**

KURITA ET AL.

**Examiner**

William J. Klimowicz

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 15-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Claim Status***

Claims 1-14 have been voluntarily cancelled by the Applicant in a preliminary amendment filed on March 16, 2005.

Claims 15-28 have been added by said amendment and are currently pending.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 15-22 and 25-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The following phrase(s) lack clear antecedent basis within the claim(s), i.e., either the particularly recited passage fails to be properly introduced prior to its appearance at that point in the claim or the structure recited in the passage is not an inherent part of or component of the previously recited structure:

- (i) Claim 15 (line 7), "said head part."
- (ii) Claim 21 (line 2), "said shutter member."
- (iii) Claim 22 (line 3), "said shutter member."

Additionally, since claims 16-21 depend directly or indirectly from claim 15, they too are thus rejected under the second paragraph of 35 U.S.C. § 112.

Claims 25-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regard to claim 25, the recitation of “wherein the portion of said recording and/or reproducing aperture along the outer rim of said main cartridge body unit is opened by being formed with a cut-out extending from the loading surface on a recording and/or reproducing apparatus in a direction along the thickness of said disc” is vague and ambiguous. More specifically, the claim is drawn to a disc cartridge, per se. Note there is no claim language preamble. The body of the claim, however, then references of the particular structure of a recording and/or reproducing apparatus, which is a device completely independent of the disc cartridge. Moreover, claim 26 even goes on to set forth a particular dimension of the disc cartridge based on the independent recording and/or reproducing apparatus (i.e., “wherein said cut-out is formed to a height at least equal to a *height as from the loading surface to said recording and/or reproducing apparatus up to a setting surface for rotation driving means* for said disc.” - Emphasis added)

Thus, it is indefinite as to the scope of claims 25-28; are they a subcombination of a disc cartridge, as the claim is currently drafted seems to indicate, or are they in fact a combination claim drawn to a disc cartridge and a recording and/or reproducing apparatus.

The metes and bounds of the claim cannot be readily ascertained.

Additionally, since claims 26-28 depend directly from claim 25, they too are thus rejected under the second paragraph of 35 U.S.C. § 112.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 15, 16, 19-21, 23 and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Takamori et al. (US 6,961,952 B1).

As per claim 15, Takamori et al. (US 6,961,952 B1) discloses a disc cartridge (e.g., see FIG. 12) comprising: a disc (e.g., 101); and a main cartridge body unit (e.g., 102) having said disc (e.g., 101) rotatably housed therein and including a recording and/or reproducing aperture (e.g., 106) for exposing a portion of said disc (101) to outside across inner and outer rims of said disc (101), wherein an entrance part (e.g., see FIG. 12 - the “upper-left” end portion of aperture (106) where opposing apertures (104, 106) meet in the thickness direction of disc (101)) for a head unit (including (128, 129) provided to a recording and/or reproducing apparatus is formed in continuation to said recording and/or reproducing aperture (106), for entrance of at least a portion of said head part (128, 129).

As per claim 16, wherein said entrance part (e.g., see FIG. 12 - the “upper-left” end portion of aperture (106) where opposing apertures (104, 106) meet in the thickness direction of

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disc (101)) for said head unit (128, 129) is an opening continuing to said recording and/or reproducing aperture (106).

As per claim 19, wherein said entrance part for said head unit (128, 129) is formed as a recess (e.g., see FIG. 12 - the “upper-left” end portion of aperture (106) where opposing apertures (104, 106) meet in the thickness direction of disc (101)).

As per claim 20, further comprising a shutter unit (108) for opening/closing said recording and/or reproducing aperture (106); and said entrance part for said head unit (e.g., see FIG. 12 - the “upper-left” end portion of aperture (106) where opposing apertures (104, 106) meet in the thickness direction of disc (101)) is formed in a surface (side-edge surface as seen in FIG. 12) on which slides said shutter unit (108) in continuation to said recording and/or reproducing aperture (106).

As per claim 21, wherein a bent part (e.g., side (110) of shutter) for closing a space produced between said shutter member (108) and said entrance part for said head unit when said shutter unit (108) has been moved to a position of closing said recording and/or reproducing aperture (106) is formed on one side (110) of the shutter member (108) of said shutter unit (108) closing said recording and/or reproducing aperture (e.g., see FIG. 12 - the “upper-left” end portion of aperture (106) where opposing apertures (104, 106) meet in the thickness direction of disc (101)).

As per claim 23, Takamori et al. (US 6,961,952 B1) discloses a recording and/or reproducing apparatus (e.g., 23, 123) comprising a disc (101); a main cartridge body unit (102) having said disc (101) rotatably housed therein and including a recording and/or reproducing aperture (106) for exposing a portion of said disc (101) to outside across inner and outer rims of

said disc (101); a cartridge loading unit (means for seating cartridge on player 23, 123) for loading a disc (101) cartridge (e.g., see FIG. 12) thereon, said disc cartridge (102) including a recess (e.g., see FIG. 12 - the "upper-left" end portion of aperture (106) where opposing apertures (104, 106) meet in the thickness direction of disc (101) or alternatively, curved hub recess for acceptance of spindle motor) continuing to said recording and/or reproducing aperture (106); and recording and/or reproducing means (e.g., including 128, 129 and/or spindle motor 126)) for recording and/or reproducing the information for the disc (101) housed in said disc cartridge (102); wherein when said recording and/or reproducing means (128, 129 and/or 126) is introduced via said recording and/or reproducing aperture (106) for recording and/or reproducing the information for said disc (101), a portion of said recording and/or reproducing means (128, 129 and/or 126) is introduced into said recess (e.g., see FIG. 12) thereon, said disc cartridge (102) including a recess (e.g., see FIG. 12 - the "upper-left" end portion of aperture (106) where opposing apertures (104, 106) meet in the thickness direction of disc (101) or alternatively, curved hub recess for acceptance of spindle motor).

As per claim 24, wherein said recording and/or reproducing means (128, 129 and/or 126) is composed of an objective lens (128) and an optical block (129) (or alternatively, the unshown bobbin structure on which lens is supported), and wherein when said objective lens (128) is introduced via said recording and/or reproducing aperture (106) for recording and/or reproducing the information for said disc (101), said optical block ((129) or alternatively, the unshown bobbin structure on which lens is supported) is introduced into said recess (e.g., see FIG. 12 - the "upper-left" end portion of aperture (106) where opposing apertures (104, 106) meet in the thickness direction of disc (101) - note that the recording/reproducing apparatus

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including (129) must be located within the recess when the optical lens is reading the outermost track of the disc).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17, 18 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takamori et al. (US 6,961,952 B1) in view of Nishikata (JP 08-031133 A).

See the description of Takamori et al. (US 6,961,952 B1), *supra*.

Additionally, as per claim 22, Takamori et al. (US 6,961,952 B1) further discloses wherein a recessed shutter slide part (e.g., 114) is formed in an area of a surface of said main cartridge body unit (102), on which slides said shutter member (108), and wherein said entrance part for said head unit (e.g., see FIG. 12 - the "upper-left" end portion of aperture (106) where opposing apertures (104, 106) meet in the thickness direction of disc (101)) is formed as a recess of a depth deeper than the depth of said shutter slide part (114) - see FIGS. 10-12.

As per claim 17, Takamori et al. (US 6,961,952 B1) does not expressly disclose wherein the thin lateral surface (122) (disposed between apertures (104) and (106)) of said entrance part for said head unit is an inclined surface for inhibiting abutment against said head part.



Nishikata (JP 08-031133 A), however, discloses an analogous disk cartridge wherein the thin lateral surface (e.g., at (10) of an entrance part for a head unit (8, 9)) is an inclined surface (10) for inhibiting abutment against said head part (8, 9).

Additionally, as per claim 18, Nishikata (JP 08-031133 A) discloses wherein said inclined surface (10) is formed on an opposite side to a side (i.e., the side closest to the disc hub which is a side of a surface which is continuous to the recording/reproducing aperture) continuing to said recording and/or reproducing aperture.

Given the express teachings and motivations, as espoused by Nishikata (JP 08-031133 A), it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the inclined lateral surface of the head entrance part of a disc cartridge, as taught by Nishikata (JP 08-031133 A), to the disc cartridge of Takamori et al. (US 6,961,952 B1).

The rationale is as follows: one of ordinary skill in the art would have been motivated to provide the inclined lateral surface of the head entrance part of a disc cartridge, as taught by Nishikata (JP 08-031133 A), to the disc cartridge of Takamori et al. (US 6,961,952 B1) in order to “avert[] damaging of an objective lens of on optical pickup and its periphery in spite of runaway of the optical pickup.” See abstract of Nishikata (JP 08-031133 A).

### ***Conclusion***

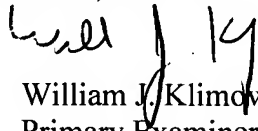
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to William J. Klimowicz whose telephone number is (571) 272-7577. The examiner can normally be reached on Monday-Friday (7:30AM-6:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
William J. Klimowicz  
Primary Examiner  
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WJK